

# Mac 24/12-20



Product code: 81200100

**MASTERVOLT**  
THE POWER TO BE INDEPENDENT

The Mac models can regulate the voltage both up and down to ensure an optimal voltage stabilisation, even when the battery voltage fluctuates due to heavy loads. The galvanic isolation between input and output prevents disruptions to, for instance, communication equipment.

- Professional use.
- Converter and 3-step battery charger.
- Parallel switchable.
- Adjustable and programmable output voltage.
- Voltage stabilisation for a longer lifespan of halogen lights, etc.
- Dimmer function for Mac & Magic models.
- Mac Plus: optimal charging in Euro 5/6 applications.

The non-isolated Mac models have an electrical connection between the input and output.

Features:

- Low costs.
- Efficient: low heat generation.
- Compact.
- Suited to applications with negative earthing.

## For the toughest tasks

The Mac DC-DC converters are designed for the toughest conditions for professional, semi-professional and recreational purposes. Even under the most extreme conditions, these DC-DC converters operate faultlessly, giving you round-the-clock output when necessary. The sustainability and technologies that underpin the Mastervolt concept have long been proven in practice. With an MTBF of 280,000 hours at full capacity and 24/7 use, the DC-DC converters are ideal for the toughest tasks and any situation that requires a reliable power supply.

## Parallel operation

Lots of consumers on board?

The parallel configuration of several units will provide you over 100 amperes. Advanced high-frequency technology with modern microprocessors ensures minimum power loss when switching from 24 to 12 V and vice versa.

## Programmable via laptop or PC

Remote control the Mac via your laptop or PC, or configure your personal preferences. The device has a communication port and easy installation with a PC-Link and MasterAdjust software.

## Energy-saving dimmer function

Many standard light dimmers convert part of the energy to heat and also lose unnecessary energy. The Mastervolt Mac converters regulate the power supply efficiently and without excessive heat build-up, for optimal safety (multiple converters can be used for multiple lamps).

# Specifications

## General specifications

Output voltage	10-15 V
Nominal output voltage (adjustable with MasterAdjust)	13.6 V
Output voltage dimmer (adjustable with MasterAdjust)	4-13 V
Output voltage stabilisation	2 % at extremes of temperatures, load and input
Output voltage ripple (peak peak)	max. 1 %
Max. output power	300 W
Nominal output power	270 W
Max. output current	20 A
Output charge current (3-step mode)	16 A
Nominal input voltage	24 V
Input voltage range	20-32 V
Input voltage range (3-step charge mode)	24-32 V
Lower input set point (adjustable with MasterAdjust)	20 V
Delay lower input set point (adjustable with MasterAdjust)	30 sec.
Galvanic isolation	no
Voltage limited	yes
Efficiency	> 90 % (at nom. input voltage, full load); peak 92 %
Parallel configuration	yes
Dimmer function	yes, by external momentary switch via fast-on connection, to be activated by DIP switch setting
Alarm contact	no
Dimensions, hwxwx	190 x 130 x 61 mm
	7.5 x 5.1 x 2.4 inch
Weight	1 kg
	2.2 lb
Compliance	CE

## Technical specifications

3-Step charge option	yes (DIP switch settings)
DC consumption	< 30 mA
Connections	screw terminals (max. wire size 16 mm <sup>2</sup> / AWG5)
Temperature range (ambient temp.)	-25 °C to 60 °C, afnemend vermogen > 40 °C
	-13 to 140 °F
Cooling	natural cooling
Protection degree	IP21
Protections	against over load & over temperature
MasterBus compatible	yes, in combination with a MasterBus Serial Interface